

**REMARKS**

**Mailing Address.** The Examiner is requested to send future correspondence to RABIN & BERDO, P.C., Suite 500, 1101 14th Street, NW, Washington, DC 20005, attorneys of record.

**Restriction.** The Examiner is thanked for the examination of claim 4. Claims 5-7 are withdrawn but depend from claim 4, and therefore are not canceled pending the Examiner's consideration of the arguments below and the possible allowance of claim 1 or claim 4.

§ 102. All claims under examination were rejected under § 102 over Rathburn. This rejection is respectfully traversed.

By entry of the previous amendment, claims 1 and 17 both recite

*... a plurality of flexible C-shaped metal conductive contacts each having an arcuate first contact end and an arcuate second contact end ... a gap of the C-shape is between the top surface and the bottom surface; and ... said contacts are mechanically retained to said interposer frame by said elastic which permits travel of said contacts in a direction perpendicular to said interposer frame,*

which is not anticipated by Rathburn's contact 154 (Figs. 8A-8B).

The claim language aboves describes vertical travel of each C-shaped metal conductive contact as a whole—that is, it is not just one arm of the C-shaped contact that moves vertically, but the entire contact. In the claims, “contact” refers to the whole and not just one part. The possibility of vertical motion improves the chances of contact with surfaces that are not exactly

flat. If both of the upper and lower surfaces are shifted in the same direction, the C-shaped contact can "float," adjusting its vertical position, and be compressed by the same amount as if the surfaces were flat. If only one surface is not flat, then the contact can move part-way toward the retracted surface and reduce the amount of extension needed to maintain electrical contact above and also below.

Rathburn is believed not to disclose this feature. Rathburn only discloses a contact 154 that is somewhat C-shaped (it is skewed and differs from a printed letter C), but this contact 154 rotates a whole, and no vertical motion whatsoever is disclosed. In fact, no vertical motion of any part of the contact 154 is disclosed.

Rathburn is concerned with two modes of compliance. The "first mode of compliance" is provided by the elastic material surrounding the contact 154, and the "second mode of compliance" is provided by the contact 154 rocking around a contact point on the side of its aperture in the housing 156 (Abstract; col. 3, lines 4-13; and claim 1 at col. 18, lines 25-36).

In relation to applied Fig. 8A, Rathburn states (col. 12, line 62), "As the connector pad 152 is brought into engagement with [upper] portion 164 of the contact member 154, the distal end 160 is displaced in a first mode of compliance until it engages with the end stop 162." The Examiner will note that in fig. 8A the end stop 162 is a vertical wall portion, and that the quoted text indicates a horizontal motion of the end 160 of the member 154. Rathburn then continues (col. 12, line 67), "A center portion 166 of the contact member 154 *pivots* on a portion 168 of the housing 156 [causing] contact member 154 to rotate in a counterclockwise direction" (emphasis added). Contact against the lower portion 170 of the contact 154 causes the same motion as contact against the top portion 164 (col. 13, lines 4-5).

Rathburn then states (col. 13, line 7), "Once the distal end 160 engages with the end stop 162, the contact member 154 operates as a load spring and deforms within its elastic range." There is no explanation of just what this deformation is, but the Applicants note that a

"deformation" is a change in shape, and not a change in position (such as for example, a motion upward or downward).

Thus, the only motions actually disclosed for the contact member 154 are (1) a horizontal motion of just its top end, (2) a rotation about the contact point 168, and (3) an unspecified "deformation." None of these implies a vertical translation of the contact member as a whole. Therefore, the present claims are not anticipated.

The Applicants believe that the projections of the housing 156, especially the projection into the middle of the C-shape, would tend to prevent any upward or downward motion of the contact 154.

§ 103. All claims under examination were rejected under § 103 over Neidich in view of Kozel. This rejection is respectfully traversed.

Neidich teaches C-shaped contacts that are held in position vertically by projections located at the middle of the C. The attachment is purely mechanical and no elastic material around the contacts is disclosed or suggested.

Kozel shows a contact that becomes C-shaped when compressed (Fig. 6), and which is embedded in elastic material.

The Examiner asserts that it would have been obvious to combine the references because Kozel teaches that the elastic material provides a spring force at col. 5, lines 35-40, reading, "The contacts 12 and the elastomeric body 10 combine to provide a predetermined spring force ... dependent on the thickness and volume and composition of the elastomeric body 10 and the shape, weight and composition of the contacts 12." Clearly, both the elastomeric body 10 and the contact 12 contribute to the compressive spring constant of the contact.

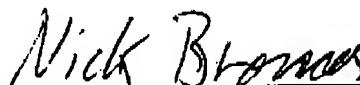
However, Neidich teaches that the spring constant ("closure force") should be low (col. 1, lines 62-67; col. 2, line 24; col. 7, line 10; col. 9, line 23). Therefore, Neidich teaches against anything that would increase the compression force: for example, the elastic of Kozel.

Furthermore, Neidich teaches that "the contact is loosely held in the passage" at col. 6, line 29, and states that the contact "snaps" (e.g., col. 8, line 7) following sliding on the contact against the adjacent surfaces; all this is seen to teach against filling the space around the contact with elastomer.

Respectfully submitted,

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Date



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*I certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office (fax no. 571-273-8300) on August 15, 2005.*

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Signature

